## **CHAPTER 4**

## POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE OLD HICKORY LAKE WATERSHED

- 4.1 Background.
- 4.2. Characterization of HUC-10 Subwatersheds
  - 4.2.A. 0513020101 (Cumberland River)
  - 4.2.B. 0513020102 (Round Lick Creek)
  - 4.2.C. 0513020103 (Goose Creek)
  - 4.2.D. 0513020104 (Cumberland River)
  - 4.2.E. 0513020105 (Bledsoe Creek)
- **4.1. BACKGROUND.** This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:
  - i. General description of the subwatershed
  - ii. Description of point source contributions
  - ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
  - iii. Description of nonpoint source contributions

The Old Hickory Lake Watershed (HUC 05130201) has been delineated into five HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

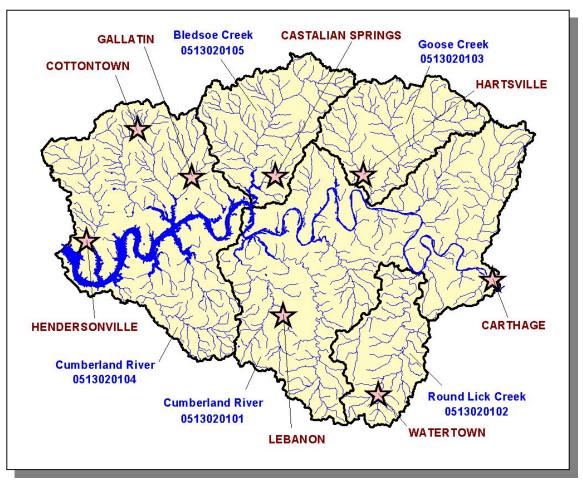


Figure 4-1. The Old Hickory Lake Watershed is Composed of Five USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Carthage, Castalian Springs, Cottontown, Gallatin, Hartsville, Hendersonville, Lebanon, and Watertown, are shown for reference.

## **DRAFT**

**4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS.** The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Old Hickory Lake Watershed.

HUC-10	HUC-12
0513020101	051302010101 (Cumberland River)
	051302010102 (Peyton Creek)
	051302010103 (Cumberland River)
	051302010104 (Cumberland River)
	051302010105 (Cedar Creek)
	051302010106 (Spring Creek)
	051302010107 (Bartons Creek)
0540000400	054000040004 (D
0513020102	051302010201 (Round Lick Creek)
	051302010202 (Jennings Fork)
0513020103	051302010301 (Upper Goose Creek)
	051302010302 (Lower Goose Creek)
0513020104	051302010401 (Cumberland River)
	051302010402 (Spencer Creek)
	051302010403 (East Camp Creek)
	051302010404 (Station Camp Creek)
	051302010405 (Cumberland River)
	051302010406 (Cedar Creek)
	051302010407 (Drakes Creek)
0513020105	051302010501 (Upper Bledsoe Creek)
	051302010502 (Lower Bledsoe Creek)

**Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages.** NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.